

SOME NEW OR LITTLE KNOWN LEPIDOPTERA FROM INDONESIA AND NEW GUINEA. I.

BY

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SATURNIIDAE

1. *Actias maenas groenendaeli* subsp. nov. (fig. 1).

♀. Differs from *maenas maenas* Doubld. by the very prominent dark and strongly dentate postmedian line. In fore wing this line is complete, in hind wing it originates just above vein 6. Antemedian line in fore wing also prominent, dark, not surpassing vein 1a—b, in hind wing indicated by a dark trace in median cell only. Eye spots rather small. On the underside of both wings the dark pattern is obsolete.

♂. Unknown.

1 ♀, only wings preserved; length of the costa of fore wing about 80 mm. Central Flores, Mataloko, 1000 m, V.1953, at lamp light. Holotype in the collection of Wageningen.

The specimen was caught by a boy who brought it to the mission station. One of the missionaries cut off the wings hoping to induce the laying of eggs in this way. Mr. J. M. A. VAN GROENENDAEL, medical officer, obtained the wings which he kindly communicated to me.

Actias maenas Dbld., described from Silhet, is known from the Andamans, Sumatra, Java, Borneo, Celebes, and doubtful from Amboina. It is recorded now for the first time from Flores. The species is not known from South India and Ceylon, Burma, Siam, Indochina, and Malaya, neither from the islands East of Java, except Flores. In Java it is confined to the mountainous Western part, though I was told more than 40 years ago, that a specimen was caught on Mt. Ungaran, Central Java.

The species forms subspecies, several of which are well defined, as *ignescens* Moore from the Andamans, and *isis* Westw. from Celebes, others are weak and hardly tenable, as *saja* van Eecke, *recta* Bouv., both from Sumatra, and *diana* Maassen & Weym., from Java. The late Dr L. J. TOXOPEUS presented a good review of the subspecies involved, in the *Chronica Naturae*, 1948, vol. 104, p. 60—62.

The genus *Actias* Leach has been split up in several genera or subgenera (*Tropaea* Hb. 1819, *Plectropteron* Hutton 1846, *Argema* Wallengr. 1858, *Graëllsia* Grote 1896, *Euandrea* Wats. 1912, *Sonthomaxia* Wats. 1912, and *Cometesia* Bouv. 1927). There is no conformity regarding the correct use of these names; moreover,

I cannot discover sufficient morphological differences by which these genera or subgenera could be clearly separated. Already MICHENER (*Bull. Am. Mus. N.H.*, 1952, vol. 98, p. 490) has stated that "there seems to be little justification for separating the Asiatic from the American species generically". Therefore he retains the name *Actias* Leach, and I agree with his view. If genera or subgenera within the old genus *Actias* should be based chiefly on general features, pattern, and colour, *Actias maenas ignescens* Moore from the Andamans and *maenas isis* Westw. from Celebes should be transferred to a new genus or subgenus!

NYCTEMERIDAE

2. *Nyctemera regalis* spec. nov.

Pl. 3, fig. 1.

♀. Head yellowish, a greyish brown spot in centre of frons and one on vertex. Palpi brownish grey, second joint yellowish at base. Antennae black, bipectinate, branches reaching tip. Fore wing uniformly grey, with a narrow white transverse band,

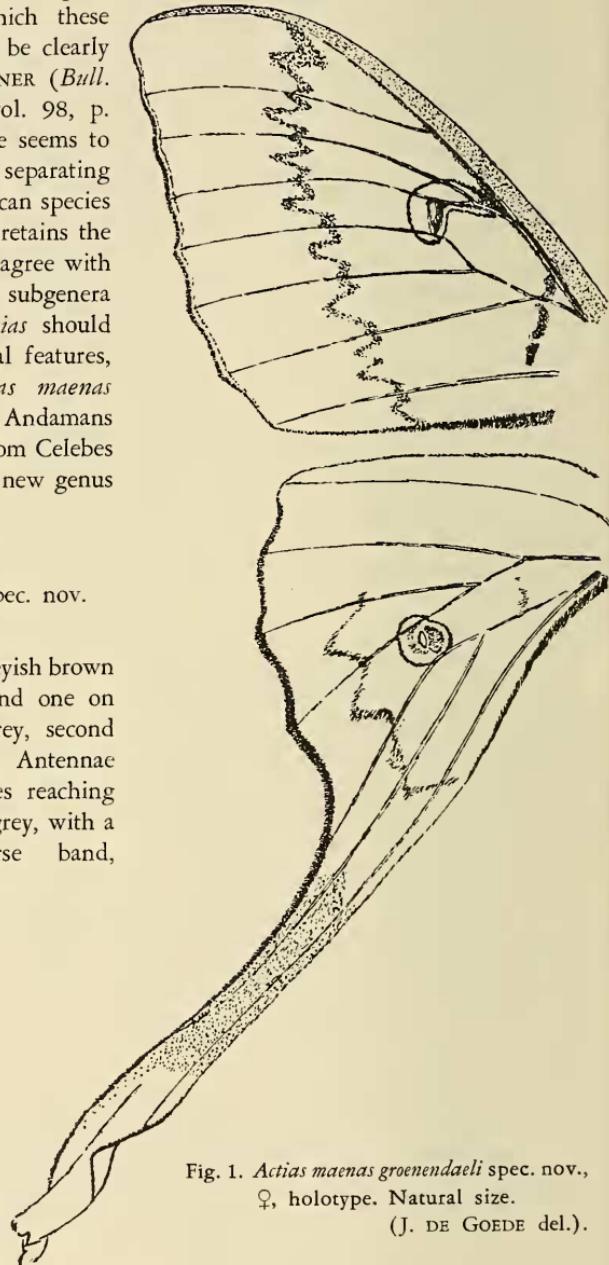


Fig. 1. *Actias maenas groenendaeli* spec. nov., ♀, holotype. Natural size.
(J. DE GOEDE del.).

strongly dentate on veins. A Z-shaped white spot in apex, between veins 6 and 8. Cilia grey, with a very small white dot on the end of veins 3 and 4. Hind wing white, slightly hyaline, with a broad border of big marginal confluent grey spots,

extending from apex to the anal margin. This margin also grey. Cilia barred alternately grey and white. Underside of wings the same as upperside.

Thorax and abdomen yellowish. On each patagium a thick greyish brown patch. Tegulae with such a spot near base and an elongated one in middle. Mesonotum with three, metanotum with one of such spots. Abdomen yellowish, dorsally with seven transverse grey bands and lateral spots. Legs grey, the femora more or less yellowish.

1 ♀, 51 mm, Central Flores, 1200 m, 30.XII.1952, J. M. A. VAN GROENENDAEL legit. Holotype in the Wageningen collection.

♂. Unknown.

This species may range near *arctata*, but is more robust and the dark ground coloration in fore wing is obvious, whereas in the females of *arctata* it is the white coloration that prevails.

3. *Nyctemera floresicola* spec. nov. Pl. 3 fig. 3.

♂. Head white, palpi and antennae black, frons and vertex bordered with white, the same as patagia, tegulae and metanotum posteriorly. Fore wings dark grey, with the veins in basal half whitish, and with a white transverse band from costa to vein 2, divided by the dark veins. Hind wing dark grey, with a large discal white patch. Underside of wings about the same as upperside. Abdomen above grey, underside whitish, with several small lateral grey spots. Short pilosity surrounding genitalia, yellowish. Underside of thorax, including legs, grey and white.

Male genitalia (fig. 4). Examined in one paratype. Uncus with tegumen triangular, the former strongly bent down, with an upper truncate projection. Valva broad, with a long apical projection, slightly surpassing uncus. Between base of this projection and base of tegumen a heavy, pointed triangular tooth. Aedeagus rather strong, somewhat bent, with its apical and oral parts obviously thickened. Juxta less conspicuous, surrounding aedeagus like a sheath.

3 ♂, 38—39 mm, with holotype, Central Flores, Hua Besi, 700 m. 1 ♀, 37 mm, allotype, the same locality. J. M. A. VAN GROENENDAEL legit.

This species resembles by its general appearance dark specimens of *N. tripunctaria* f. *assimile* Voll.; it might become confounded also with *trita* Swinh. By the structure of the male genitalia, however, it proves distinctly to belong to the *popiya* Swinh. group, but it differs from *popiya* by the very different shape of the uncus and the tegumen, and of the valvae.

4. *Nyctemera selecta vollenhovi* Sn. Pl. 3 fig. 4.

N. selecta Walk. 1854 was described from „the Moluccas” without precise locality; *vollenhovi* Sn. 1890 came from Tanah Djampea, an island situated between Celebes and Flores. SNELLEN (1891, *Tijd. Entom.*, vol. 34, p. 253) records it from Flores. PAGENSTECHER (1897, Kükenth. Reise, p. 440) gives as localities Halmahera and Flores. *N. selecta* has a very wide distribution, from the Moluccas throughout New Guinea, and several Oceanic islands, to the Philippine Islands. Several synonyms are recorded, perhaps these may be referred to certain

subspecies, not yet clearly defined. Very remarkable is the occurrence of *selecta* in the Andaman Islands, as subsp. *leucospilota* Moore, and the capture of one male in the Street Malacca, recorded by TAMS (1953, *Mem. Mus. Brux.*, hors série, vol. 4, p. 39, pl. 1 f. 10).

Concerning *vollenhovi*, excellently figured by SNELLEN, several authors consider it as a distinct species, others have omitted it in their lists (PAGENSTECHER, 1901; SEITZ, vol. 10, 1915). When comparing *selecta* and *vollenhovi*, there cannot be the slightest doubt that both are the same species and that *vollenhovi* differs only by its much paler dark pattern which may be indicated as a light dirty greyish brown. Therefore it may be considered as a subspecies of *selecta* Walk.

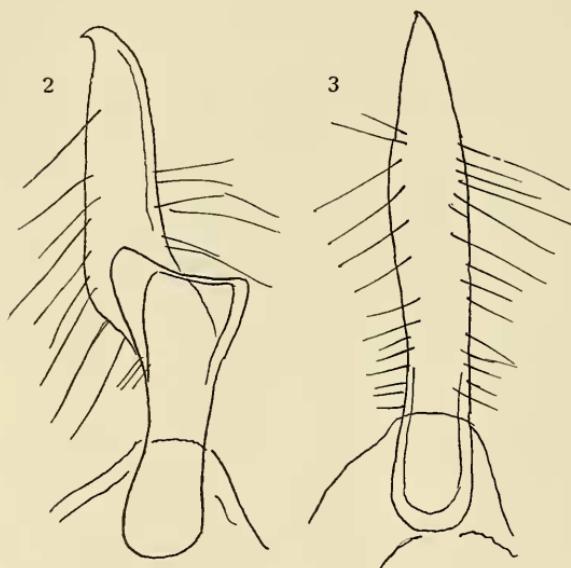


Fig. 2. Uncus of *Nyct. selecta vollenhovi* Sn. Flores. Fig. 3. The same of *Nyct. selecta* Walk., North Dutch New Guinea.

of the uncus has a special feature, difficult to describe. In *selecta* the uncus is without this complication, simple and rather straight. In both insects the valva is of an intricate construction, with an apical membranaceous part, bordered dorsally by a long and strongly chitinized, digitiform appendage.

I have 2 ♂ and 7 ♀ of *selecta* from North New Guinea, collected by VAN DEN BERGH, 1929, and 2 ♀ from Batjan, collected by myself, 1929. *N. vollenhovi* is represented here by 3 ♂ and 3 ♀ from Central Flores, 1951, J. M. A. VAN GROENENDAEL, and by 2 ♂, Bujutan, Kangean Island, 1936, Mrs. M. E. WALSH.

In the plate 3 fig. 4 representing a ♂ of *N. selecta vollenhovi* from Central Flores, the intensity of the markings is too pronounced.

The following *Nyctemera* species are now known from Flores :

1. *N. coleta coleta* Stoll, common
2. *N. barlus mundipicta* Walk., common
3. *N. delocyma delocyma* Swinh., 1917
4. *N. everetti everetti* Swinh., 1917

5. *N. macklotti macklotti* Voll., 1863
6. *N. floresicola floresicola* Rpke.
7. *N. regalis regalis* Rpke.

5. *Nyctemera timorensis* spec. nov. Pl. 3 fig. 2.

♀. Head and palpi light greyish, vertex, patagia, tegulae and thorax whitish, grading into light yellowish, one grey dot on vertex, one on each patagium, two on each tegula, two pairs on thorax above. Antennae black, weakly bipectinate to tip. Fore wings light greyish brown, about the same as in some specimens of *vollenhovi*, with a clear-cut white marking, consisting of an Y-shaped transverse band which emits from its inner side a small white spur in cell 1c. A white basal patch between veins 1a—b and 2; it has a dark spot near base and is preceded by a small round white spot in cell 1c, one small apical white spot in cell 8 and one near termen in cell 3. Cilia grey.

Hind wing white, with a regular greyish brown marginal band from apex to anal angle. In cell 3 of this band a small white spot, with a projection towards cell 2, along termen.

Underside of wings about the same as upperside, hind wing with a small dark spot on middle of costa. Legs light greyish, tarsi not banded.

1 ♀ holotype, 38 mm, Soë Timor, 1925, legit Mrs. M. E. WALSH. In the Wageningen collection.

♂. Unknown.

NOCTUIDAE

6. *Paranagia rufostrigata* Beth. Baker. Pl. 3 fig. 7.

Beth.-Baker, Nov. Zool., vol. 13, 1906, p. 251 (*Catocala*), Brit. New Guinea. Hampson, Description &c, 1926, p. 64 (*Paranagia*).

1 ♂, 50 mm, Netherl. New. Guinea Exped. 1926, Hoofdbivak, ca. 250 m, legit DOCTERS VAN LEEUWEN, September, 1926. In the Bogor Museum.

A beautiful Noctuid, very dark blackish brown, costa of fore wing with the same small light markings, indicating the origin of the cross lines. Hind wings with the discus white. Hind legs extremely hairy.

7. *Melipotis kebea borneensis* Prout. Pl. 3 fig. 6.

Beth.-Baker, Nov. Zool., vol. 13, 1906, p. 249 (*Ercheia*): Brit. New Guinea. Hampson, Cat., vol. 12, 1913, p. 483 ♂ ♀, f. 115 ♂ (*cebea*!): Brit. New Guinea; Queensland.

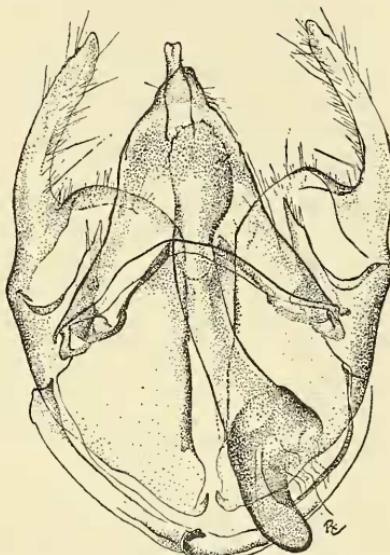


Fig. 4. *Nyctemera floresicola* spec. nov., male genitalia, paratype.

Prout, Ann. Mag. N.H. ser. 9, vol. 8, 1919, p. 176 ♀ (*Ercheia kebea borneensis*): Sarawak.

Gaede in Seitz, vol. 11, 1938, p. 476, pl. 51e (*kebeae*!).

1 ♀, 44 mm, Samarinda, South East Borneo, October 1939, legit Mrs. M. E. WALSH, in the Bogor Museum.

The specimen agrees with Prout's description fairly well. The tooth-like projection of the hind margin in the fore wing is very obvious, much larger than in GAEDE's figure; it gives a pecular appearance to the insect.

8. *Sarbanissa albifascia* Walk. Pl. 3 fig. 8.

Walker, List &c., vol. 33, 1865, p. 933 ♀ (*Catocala*): Hindostan.

Hampson, Moths, vol. 2, 1894, p. 157 (*Zalissa*): N. China; Ind.; Moulm; Rangoon; Andam.

Jordan, in Seitz, 3, 1909 ?, p. 8, pl. 1 f (*Zalissa albifasciata*!).

Hampson, Cat. vol. 9, 1910, p. 439 (*Seudyra*). Sikkim, Bombay, Burma.

Jordan, in Seitz, vol. 10, 1912, p. 26 (*Seudyra*). Ind.; Mal.; Andam.

Tams, Journ. N.H. Soc. Siam, vol. 6, 1924, p. 236 (*Sarbanissa*): Siam.

1 ♀, 55 mm, Samarinda, S.E. Borneo, October 1939, legit Mrs. M. E. WALSH, in the Bogor Museum.

This is the first record from the Archipelago. A beautiful and conspicuous moth; the specimen has the white patches in discus of fore wing and in apex of hind wing, large and obvious. The ground coloration of fore wing is a purplish brown. The cadmium yellow of hind wing and abdomen is much contrasting.

9. *Taviodes javanica* spec. nov. Pl. 3 fig. 5.

♂. Head and palpi greyish brown, mixed with many white scales. Third joint of palpi almost as long as second. In fresh specimens the ground coloration is a greyish purplish brown, in worn ones it becomes much lighter, light greyish to reddish brown. Fore wing mixed with bluish white scales, which indicate the obsolete reniform and also orbiform spots. Fore wing with one dark antemarginal and one postmedian, both strongly angled near costa, but further rather straight. A dark antemedian just before the orbiform spot, rather indistinct.

In hind wing the ground colour has a yellowish brown tinge. Three cross lines more distinct than in fore wing. Cilia in both wings uniform brown, in hind wing near anal angle with the outer edge white.

Underside much lighter, pale purplish grey to whitish in marginal area. The antemarginal strongly developed, bordered with white, the other cross lines obsolete. The legs are light greyish and whitish.

♀. Agrees with the ♂, but the general coloration lighter, slightly more reddish. Antennae minutely ciliate.

4 ♂, 38—40 mm, with holotype from various localities in West Java, leg. Mrs. M. E. WALSH, 1 ♂ from Blawan, Idjen Mountains East Java, ca. 1000 m, leg. H. LUCHT, 1 ♀, allotype, from Gunung Madur, South Bantam, West Java, leg. Mrs. M. E. WALSH. All in the Wageningen collection.

The genus *Taviodes* Hamps. 1926 is African, three species having been described from Africa, and a fourth, *T. fulvescens* Hamps., is known from Bhutan. The occurrence of a fifth species from Java is remarkable. The insect is distinct by its broad wings, with the emarginate termen in fore wing.